Amendment of the Claims

1-15. (Cancelled).

16. (Currently amended) A method of killing a B cell lymphoma cell in a subject comprising administering a therapeutically effective amount of an immunoconjugate to the subject,

wherein the immunoconjugate comprises an anti-CD20 antibody or an ~~immunogenic~~ immunologic fragment thereof that binds to CD20 ~~expressed by a B cell lymphoma cell in the subject~~ and is fused at its carboxy terminus to interferon-α-2a, and

wherein ~~said anti-CD20 antibody or immunogenic fragment thereof possesses human effector function, and is fused at its carboxy terminus to interferon-α-2a (IFN-α-2a) that binds a~~ the immunoconjugate binds to CD20 expressed by a B cell lymphoma cell in the subject and binds to an IFN-α-2a receptor expressed on the surface of an effector cell.

17-22. (Cancelled).

23. (Currently amended) The method of claim 16, wherein the effector cell is ~~a cell which expresses an IFN-α-2a receptor~~ selected from the group~~s~~ consisting of natural killer (NK) cells, lymphocyte-activated killer (LAK) cells, macrophages, monocytes, and polymorphonuclear (PMN) cells.

24. (Currently amended) The method of claim 16, wherein ~~said~~ the immunoconjugate facilitates extracellular (ADCC-type) and/or intracellular (phagocytic) killing of ~~target cell~~ the B cell lymphoma cell.

25. (Currently amended) The method of claim 16, wherein ~~said immunoconjugate comprises an~~ the anti-CD20 antibody or ~~immunogenic~~ immunologic fragment thereof is selected from the group consisting of rituximab, 1F5, ibritumomab, 1H4 single chain Fv antibody, tositumomab ~~antibody~~, and immunologic fragments thereof.

26. (Cancelled).

27. (Currently amended) The method of claim 16, wherein the anti-CD20 antibody or ~~immunogenic~~ immunologic fragment thereof is a humanized or chimeric antibody.

28. (Previously presented) The method of claim 16, wherein the immunoconjugate is administered to the subject by intravenous injection.

29. (Currently amended) A method of treating B cell lymphoma in a subject comprising administering a therapeutically effective amount of a immunoconjugate to the subject,

wherein ~~said fusion protein~~ the immunoconjugate comprises an anti-CD20 antibody or an ~~immunogenic~~ immunologic fragment thereof that binds to CD20 ~~expressed by a B cell lymphoma cell in the subject~~ and is fused at its carboxy terminus to interferon-α-2a, and

wherein ~~said anti-CD20 antibody or immunogenic fragment thereof possesses human effector function, and is fused at its carboxy terminus to interferon-α 2a (IFN-α 2a) that binds a~~ the immunoconjugate binds to CD20 expressed by a B cell lymphoma cell in the subject and binds to an IFN-α-2a receptor expressed on the surface of an effector cell.

30. (Previously presented) The method of claim 29, wherein the effector cell is selected from the group consisting of natural killer (NK) cell, lymphocyte-activated killer (LAK) cell, macrophage, monocyte, and polymorphonuclear (PMN) cells.

31. (Previously presented) The method of claim 29, wherein the anti-CD20 antibody is rituximab.

32. (Previously presented) The method of claim 29, wherein the anti-CD20 antibody is1F5.

33. (Previously presented) The method of claim 29, wherein the anti-CD20 antibody is ibritumomab.

34. (Previously presented) The method of claim 29, wherein the anti-CD20 antibody is 1H4 single chain Fv antibody.

35. (Previously presented) The method of claim 29, wherein the anti-CD20 antibody is tositumomab.

36. (Currently amended) The method of claim 29, wherein the ~~fusion protein~~ immunoconjugate is administered to the subject by intravenous injection.

37. (Previously presented) The method of claim 16, wherein the immunoconjugate is administered to the subject by inhalation or transdermal application.

38. (Currently amended) The method of claim 29, wherein the ~~fusion protein~~ immunoconjugate is administered to the subject by inhalation or transdermal application.